

# EXPECTED TIME

State of Michigan LPI  
Methodology Activity

Activity 6





**WHERE DOES  
EXPECTED TIME  
COME FROM?**

It comes from a

Project Management Tool called....

PERT

 **P**ROGRAM

**E**VALUATION

**R**EVIEW

**T**ECHNIQUE

PERT is a

**TOOL** 

used for project planning

and is designed to manage time

Expected Time is...

a formula within PERT to

ESTIMATE the cost and/or time  
required to complete a task



Why use

EXPECTED TIME?

to estimate the cost or time savings  
associated with

**ELIMINATED TASKS**

or compare

**KEY PROCESS CHANGES (KPC)**



When should we use



EXPECTED?  
TIME

Use EXPECTED TIME on  
larger, complex processes



such as treatment programs for  
prisoners





Or when the process's timelines  
are random and uncertain



such as court appeals



Who  
should use

*EXPECTED TIME?*



# INDIVIDUALS



# WORK GROUPS

trying to identify how a process  
improvement can save

**TIME**

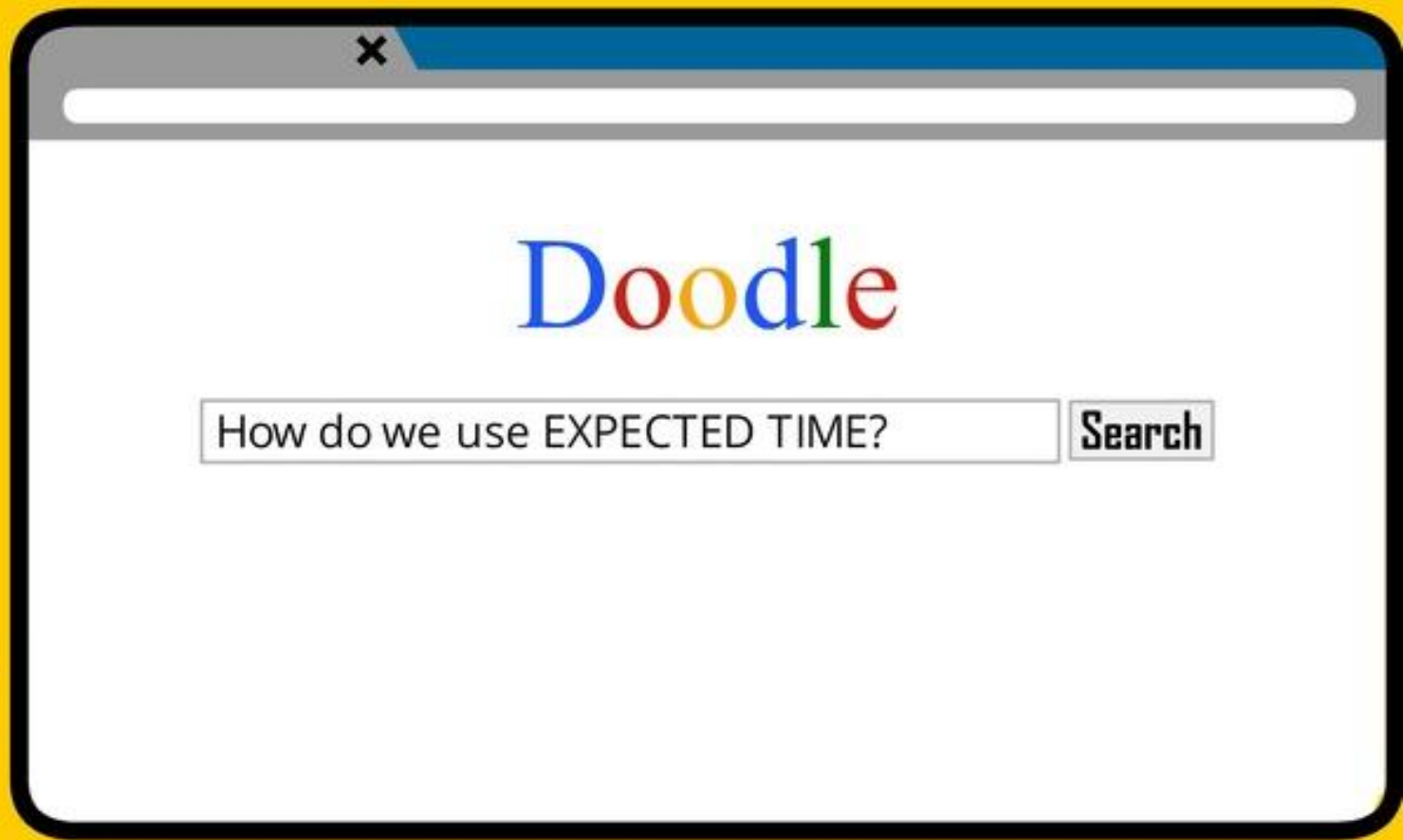


**WORK EFFORT**



**MONEY**





# Cost & Time Savings

**KPC**

**O**

**M**

**P**

**#/Yr**

**#/ppl**

Key Process  
Changes  
(eliminated  
tasks)

Optimistic  
Time

## Cost & Time Savings

KPC	O	M	P	#/Yr	#/ppl

# Cost & Time Savings

KPC	O	M	P	#/Yr	#/ppl

Most  
Likely  
Time



# Cost & Savings

Pessimistic  
Time

**KPC**

**O**

**M**

**P**

**#/Yr**

**#/ppl**

KPC	O	M	P	#/Yr	#/ppl

# Cost & Time Savings

**KPC**

**O**

**M**

**P**

**#/Yr**

**#/ppl**

Number  
Per Year

Cost & Time Sa

Who Does the Task

KPC	O	M	P	#/Yr	#/ppl

**FIRST!**



List each Key Process  
Change (KPC) or task  
in the first column of  
the chart

# Cost & Time Savings

**KPC**

**O**

**M**

**P**

**#/Yr**

**#/ppl**

Double  
Approval

Report  
Generation

Update  
Paper  
Form



Let's look at

## **HANDS ON TIME:**

time spent working on a task,  
not including time attributed to  
interruptions, delays, or inactivity

Now we can record the:

**OPTIMISTIC**

**MOST LIKELY**

**& PESSIMISTIC**



Times

○ is for...

**OPTIMISTIC**

the **MINIMUM**  
possible hands on  
time required to  
accomplish the task



# Cost & Time Savings

KPC	O	M	P	#/Yr	#/ppl
Double Approval	20 min				
Report Generation	10 min				
Update Paper Form	60 min				



M is for...

**MOST LIKELY**



the **MEDIAN**  
possible hands on  
time required to  
accomplish the task



# Cost & Time Savings

KPC	O	M	P	#/Yr	#/ppl
Double Approval	20 min	30 min			
Report Generation	10 min	30 min			
Update Paper Form	60 min	90 min			

P is for...

**PESSIMISTIC**

the **MAXIMUM**  
possible hands on  
time required to  
accomplish the task



# Cost & Time Savings

KPC	O	M	P	#/Yr	#/ppl
Double Approval	20 min	30 min	60 min		
Report Generation	10 min	30 min	45 min		
Update Paper Form	60 min	90 min	120 min		



**AND NOW...**

Calculation Time!

**SIMPLY PLUG THE TIMES INTO  
THE FORMULA!**

$$TE = [O + 4M + P] / 6$$

expected time

1

2

3

+

4

5

6

-

7

8

9

0



**NEXT!**







# YEARS

2016

2017

2018

# Cost & Time Savings

KPC	O	M	P	#/Yr	#/ppl
Double Approval	20 min	30 min	60 min	780/yr	
Report Generation	10 min	30 min	45 min	52/yr	
Update Paper Form	60 min	90 min	120 min	520/yr	

**THEN!**



#/ppl
Mgr

Input the classification  
that completes the task  
to help calculate cost

**LASTLY!**





# COMMUNICATE

these projected time and cost savings to:

1. To help justify the elimination of a task
2. To quantify the time and cost benefits of key process changes



Click below for  
the module  
review!

must complete the survey to receive  
certificate of completion for  
Level I LPI Training

THE INTENDED AUDIENCE FOR THIS MODULE IS STATE OF MICHIGAN EMPLOYEES ONLY AND THE USE OF THIS MATERIAL IS THE SOLE RESPONSIBILITY OF THE AUDIENCE